

REMARKS

Preliminary Matters:

Dealing with preliminary matters first, Applicant thanks the Examiner for acknowledging Applicant's claim to priority and receipt of the priority document. Further, the Examiner has accepted the drawings as filed on October 11, 2005. Finally, it is noted with appreciation that the Examiner has considered the two U.S. references cited in the Information Disclosure Statement filed concurrently with the application. Applicant notes, however, that the Examiner did not consider the French reference also cited therein. The French Reference 2327191 was cited in the International Search Report, dated October 29, 2004. It is respectfully requested that the Examiner re-consider the French reference.

Disposition of Claims:

Claims 1-24 are indicated as pending in the application. Of these claims, claims 6-18 were canceled in the Preliminary Amendment filed on October 11, 2005, leaving claims 1-5 and 19-24, pending in the application.

Claim Objections:

Claims 3 and 4 are objected to as containing reference numerals 60 and 70 not included in the specification. The above amendments overcome this objection.

Claim Rejections Under 35 U.S.C. § 112:

Claim 5 is rejected under 35 U.S.C. § 112 (second paragraph) as being indefinite for failing to particularly point out and distinctly claim the subject invention. In view of the above amendment to claim 1, it is submitted that this rejection has been overcome.

Claim Rejections Under 35 U.S.C. § § 102 and 103:

Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by Powell (U.S. Patent No. 2,093,619). Further, claims 1-3 and 22 are rejected under 35 U.S.C. § 102(b) as being anticipated by Mausgrover, et al. (U.S. Patent No. 5,433,927). Still further, claims 1-3 and 21-23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Takeda, et al. (WIPO Publication No. 2001/87364 A1) with reference to Takeda (U.S. Patent Publication No. 2003/0072675) in view of Bunn (U.S. Patent No. 3,933,614). Claims 4 and 5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Takeda in view of Bunn as applied to claims 1 and 3 and further in view of Slipiec, et al. (U.S. Patent No. 3,967,131). Claims 19 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mausgrover as applied to claim 1 above, and further in view of Hutter (U.S. patent No. 4,101,783). Finally, claim 24 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Takeda as modified by Bunn as applied to claims 1 and 23 above, and further in view of Blanchard (U.S. Patent No. 3,530,058). For the following reasons, Applicant respectfully traverses these rejections.

Claim 1 has been amended to include the limitation of claim 4. Thus, claim 1 recites that “the outer electrode, at a radial distance from the insulator tube, forms a guiding element in which the contact element is received.”

The radial distance (spacing) between the insulator tube and the contact element is essential in order to avoid a brush discharge (or brown-out discharge). If the contact element is located between the outer electrode and the insulator tube in direct contact with the insulator tube as disclosed in Slipiec, et al. (relied upon by the Examiner in rejecting claim 4), a discharge in the region of the contact element directly between the contact element and the inner electrode

occurs. There is not a homogeneous discharge over the whole circumference of the insulator tube.

However, if according to the invention, the contact element is located a radial distance from the insulator tube and, therefore, also at a greater distance to the inner electrode than the outer electrode, a homogeneous discharge between the outer electrode and the inner electrode is achieved.

This is not taught or suggested by any of the cited prior art documents.

Conclusion:

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: January 5, 2011

/Brian W. Hannon/
Brian W. Hannon
Registration No. 32,778